雲南生物考察报告

(鞘翅目,龟岬亚科)

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中国科学院与苏联科学院曾联合組織了生物考察队,于1955—1957 年間每年在云南進行动植物調查,1955 年夏幷曾去四川峨嵋山調查,收集了很豐富的材料。 本篇是关于鞘翅目叶甲亞科的材料鑑定报告,共計13 屬60种,其中有1个新屬,2个新亞屬,10个新种,还有5个种是中国的新記錄。

所記种的單个标本,包括新种正模标本,都保存在中国科学院昆虫研究所;所有重复 标本,包括新种的副模标本,都由兩国科学院分別保存。

一、种属名录

I. Gen. Notosacantha Chevr.

- 1. N. ginpinensis, 新种。云南:金平猛喇。
- 2. N. nigrodorsata, 新种。云南:車里流沙河。
- 3. N. oblongopunctata Gressitt, 1952. 云南:普洱。
- 4. N. sauteri Spaeth, 1914. 云南:大理,下关,昆明,景东,思茅,兽文。

II. Gen. Epistictia Hincks

5. E. viridimaculata Boheman, 1850. 云南:龙陵,瑞丽,景谷,屏边,普洱,金平。

III. Gen. Craspedonta Chevrolat

6. C. leayana leayana Latr., 1807. 云南:西双版納。(中国初次記录)

IV. Gen. Basiprionota Chevrolat

A. Subg. Stenoprioptera Spaeth

7. B. (S.) tibetana Spaeth, 1914. 四川:峨嵋山。

B. Subg. Basiprionota, s. str.

- 8. B. (s. str.) bimaculata Thunb., 1789. 云南:西双版納。
- 9. B. (s. str.) laotica Spaeth, 1933. 云南:金平河头寨。(中国初次記录)
- 10. B. (s. str.) westermanni Mannh., 1844. 云南:弥勒,金平,思茅——普文龙山。(中国初次記录)

V. Gen. Taiwania Spaeth

A. Subg. Cyclocassida, 新亚属

- 11. T. (C.) ginpinica, 新种。云南:金平猛喇。
- 12. T. (C.) nucula Spaeth, 1914. 云南:永平,保山,龙陵,景东,鎮康,金平。
- 13. T. (C.) probata Spaeth, 1914. 云南:下关。
- 14. T. (C.) uniorbis, 新种。云南:屏边大围山。
- 15. T. (C.) variabilis, 新种。云南:景东,思茅,河口,西双版納。

B. Subg. Yunocassis, 新亚属

- 16. T. (Y.) appluda Spaeth, 1926. 云南:思茅——普文。
- 17. T. (Y.) inciens Spaeth, 1926. 云南:金平猛喇。
- 18. T. (Y.) occursans Spaeth, 1914. 云南:四双版納。

C. Subg. Taiwania, s. str.

- 19. T. (s. str.) binorbis, 新种。云南:芒市三台山,西双版納。
- 20. T. (s. str.) circumdata Herbst, 1790. 云南:保山,景东,孟定,金平。
- 21. T. (s. str.) corbetti Weise, 1897. 云南:金平,西双版納。
- 22. T. (s. str.) desultrix Spaeth, 1914. 云南:元江,墨江。
- 23. T. (s. str.) eoa Spaeth, 1928. 云南:景东,金平。
- 24. T. (s. str.) flavoscutata Spaeth, 1914. 云南:保山。
- 25. T. (s. str.) icterica Boheman, 1854. 云南:金平, 普文, 車里。
- 26. T. (s. str.) imitatrix Gressitt, 1952. 云南:景谷,金平。
- 27. T. (s. str.) immaculicollis, 新种。云南:普洱。
- 28. T. (s. str.) nigriventris Boheman, 1854. 云南:永平,保山,景东,箇旧,金平,四双版納。
- 29. T. (s. str.) obtusata Boheman, 1854. 云南:景东,元江,箇旧,西怒江,金平,思茅,河口,西双版納。
- 30. T. (s. str.) perplexa, 新种。云南:金平,小勐养。
- 31. T. (s. str.) purpuricollis Spaeth, 1914. 云南:保山。
- 32. T. (s. str.) rati Maulik, 1923. 四川:峨嵋山;云南:小勐养。
- 33. T. (s. str.) sauteri Spaeth, 1913. 四川:峨嵋山;云南:屏边大围山。
- 34. T. (s. str.) simanica, 新种。云南:下关,保山,龙陵,芒市,景东,瑞丽,思茅,普文。
- 35. T. (s. str.) triangulum indochinensis Spaeth, 1919. 云南:金平,河口,西双版納。
- 36. T. (s. str.) truncatipennis Spaeth, 1914. 云南:金平河头寨。
- 37. T. (s. str.) versicolor Boheman, 1855. 云南: 龙陵, 景谷, 金平, 思茅, 四双版納。
- 38. T. (s. str.) vitalisi, Spaeth, 1928. 云南:金平,河口,勐海。

VI. Gen. Cyrtonocassis, 新属

- 39. C. conchyliata Spaeth, 1914. 云南:小勐养。
- 40. C. tumidicollis, 新种。云南:金平猛喇,西双版納。

VII. Gen. Glyphocassis Spaeth

- A. Subg. Glyphocassis, s. str.
- 41. G. (s. str.) trilineata trilineata Hope, 1831. 云南:景东,思茅,西双版納。

B. Subg. Hebdomecosta Spaeth

42. G. (H.) lepida Spaeth, 1914. 四川:峨嵋山。

VIII. Gen. Chiridopsis Spaeth

- 43. Ch. bowringi Boheman, 1885. 云南:金平,河口,四双版納。
- 44. Ch. punctata punctata Weber, 1801. 云南:金平猛喇。
- 45. Ch. scalaris Weber, 1801. 云南:金平猛喇,西双版納。

IX. Gen. Thlaspida Weise

- 46. Th. biramosa Boheman, 1855. 四川:峨嵋山;云南:元江,金平猛喇,西双版納。
- 47. Th. cribrosa Boheman, 1855. 云南: 昆洛公路, 芒市, 孟定, 金平, 思茅, 西双版納。

X. Gen. Sindia Weise

48. S. sedecimmaculata Boheman, 1856. 云南:永平,保山,金平,思茅——普文龙山。

XI. Gen. Sindiola Spaeth

- 49. S. hospita Boheman, 1855. 云南:金平猛喇,西双版納。
- 50. S. vigintisexnotata Boheman, 1855. 云南:屏边,金平,四双版納。(中国初次記录)

XII. Gen. Laccoptera Boheman

- 51. L. plagiograpta Maulik, 1919. 云南:龙陵,金平,猛海。(中国初次記录)
- 52. L. quadrimaculata Thunb., 1789. 云南:永平,保山,芒市,景东,金平,思茅,河口,西双版納。
- 53. L. yunnanica Spaeth, 1914. 云南:昆明。

XIII. Gen. Aspidomorpha Hope

- 54. A. chandrika Maulik, 1918. 云南:普文。
- 55. A. dorsata F., 1787. 云南:瑞丽,金平。
- 56. A. furcata Thunb., 1789. 云南: 芒市, 景东, 金平, 思茅, 河口, 西双版納。
- 57. A. fuscopunctata Boheman, 1854. 云南:保山,芒市,瑞丽,金平,河口,西双版納。
- 58. A indica Boheman, 1854. 四川:峨嵋山;云南:永平,保山,昆明,龙陵,景东,金平,思茅,西双版納。
- 59. A. miliaris F., 1775. 云南:下关四山,景东,金平,思茅,河口,西双版納。
- 60. A. sanctae-crucis F., 1792. 四川:峨嵋山;云南:龙陵,屏边,金平,河口,四双版納。

二、新种新属記述

Notosacantha ginpinensis, 新种。

小型,体光亮,鞘翅盘区有两行脊瘤突起,敞边寬闊、平坦,外緣呈鋸齿状,无网紋,具粗大刻点。 体色棕黄略带赤,背面盘区全部酱紅或酱黑,敞边黄色,透明,窗斑区較淡,其后稍深,形成极其模糊的斑紋;触角及足棕黄色,后者微带赤。

椭圆形。头背端部有凸片两叶,位于复眼之前,两片間具小凹口,片侧呈浅弧形膨出(图1),与头頂无明确分界。 触角短,第2节粗圓,球形,3—6节細瘦,7—11节扁闊多毛,組成錘棒,形似禾穗。 前胸背板呈扁闊"凹"字形,盘区高低不平,隆起部分光洁,仅沟紋內有細刻点;敞边刻点稀疏粗大,一般为橫置长卵形,边緣鋸齿尚深,較显著。小盾片端圓,带舌形。鞘翅基緣与胸基近乎等闊,向后微微膨圓,盘区具两条断續的枞脊綫,称中綫与肩綫,两綫各具4个脊瘤,肩綫上第2个較低矮模糊,第3、4个各有横脊与中綫連接,尾端另有1个較孤立的小瘤,所有瘤突均呈尖削的脊状(图3);刻点粗密,中縫隆起,基部平坦;敞边外緣鋸齿較細弱,尾部缺如,窗斑較小內半光洁,外方具三行刻点。足短壮,第4跗

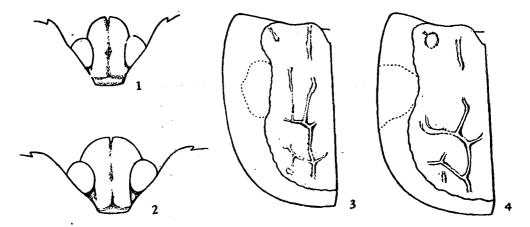


图 1 与 3 Notosacantha ginpinensis; 2 与 4 N. nigrodorsata; 1 与 2 眼前凸片; 3 与 4 鞘翅瘤序

节短于第3节,后者极闊大,填毛长,远远超出爪节。

体长 4毫米, 体闊 3.6毫米

正模¹¹♀ 云南:金平猛喇(370米,1956、IV. 18)。

Notosacantha nigrodorsata, 新种

本种与 N. ginpinensis 近緣, 鞘翅脊綫、敞边刻点等大致相似, 但依据其形状, 大小, 瘤序以及体色可以区别。

背面色泽深淡分明,近乎全部黑色,仅留出周围及窗斑为淡黄色,做边尾端全部淡色; 腹面包括头部、触角及足棕黄色。

体椭圆形,鞘翅基緣与胸基等闊,两側略膨圓,最闊处在窗斑区。眼前凸片寬闊,向前弓圓,弧度較深,向后明显收狹,中央具級沟,与头頂分界不明确(图2); 額唇基端部具三角凹洼,較深。触角較短,第2节球形,3—6节細小多毛,末端5节粗闊,組成錘棒。前胸背板扁闊,带"凹"字形,盘面仅凹紋內有細刻点; 敞边外緣鋸齿浅弱,刻点大都呈长卵形,透明。鞘翅脊瘤如图4所示,中綫第3瘤突的橫側脊显著,端橫脊完整,端瘤无縫枝; 肩綫第2瘤极小、模糊; 盘区刻点不規則,敞边窗斑直达外緣,大部光洁,仅外側有两行刻点。足短壮,脛、跗节約等长,第4跗节显短于第3节。

体长 4.5毫米; 体闊 3.8毫米。

正模d 云南:車里流沙河(1957、III. 31)。

台龟甲属 Taiwania Spaeth, 1913

本文所指的台龟甲属比史佩德(Spaeth)原定的范围要大得多。按照史氏的原記,它和龟甲属(Cassida L.)的区別在于爪呈附齿式,做边大致透明,鞘翅刻点排成整齐行列。我們把这两个属的內容作了調整:龟甲属主要包含旧北区的种类,台龟甲属主要包含东洋区的种类,两属差别在于前者的前胸背板及額唇基一般粗糙,常具粗刻点;鞘翅敞边大都不透明,肩角很少前伸到前胸背板中綫,駝頂一般較平,虽亦有明显拱起的,但不呈瘤突或瘤塞。本属的前胸背板及額唇基則一般光洁无皺,刻点缺如或細弱不显,如較粗則刻点間空隙亦无皺紋或不呈皮紋状,鞘翅敞边大都透明,肩角显著前伸,甚至有超过前胸背板中綫的,駝頂較拱凸,或呈瘤突与瘤峯状。据此定义,原隶于龟甲属的一部分单齿爪种类,必須轉移到台龟甲属內,因而本属可分为三个亚属,其中两个是新亚属,它們的区别如下表:

- 2(1) 爪单齿式

圓龟甲亚属的模式种是 T. (C.) variabilis, 新种; 云龟甲亚属的模式种为 Cassida appluda Spaeth。至于台龟甲属按照史佩德所定模式种为 T. sauteri Spaeth。

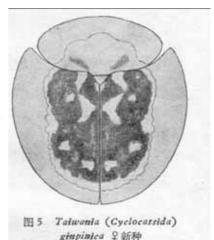
Taiwania (Cyclocassida) ginpinica, 新种

¹⁾ 正模=Holotype, 配模=Allotype, 副模=Paratype. 按照近代分类学概念, 所謂"模式标本"实际是"对照标本"。

較圓的椭圓形。体大部黑色,敞边淡棕黃,敞透明。 头部額唇基棕黃色,口綠带褐。 前胸背板棕黄,盘侧各具一个斜形褐斑。 小盾片棕黄,黑褐色边。 鞘翅盘区黑色,露出黄 色淡斑, 較清晰而略形凸起的有: 中縫基部淡色; 駝頂两側各有一个大斑, 略呈三角形, 較 最凸起;每翅基部中央一个,长形,基闊端狹,伸到第2行距,与前者三角形斑似断似續;肩

瘤后第 3—4 行距間一个圓斑; 翅后部第 1—2 行距間一 个,較大;第4、第5、第6行距上均有淡斑;沿盘周一条 淡色闊边,此外如中縫中段及部分行距上亦略現淡色,但 极其模糊。 腹面除前胸腹側片和腹部两側外,呈黑色。 触角及足全部棕黄色。

額唇基长显胜于闊,梯形,面平,略具細刻点。 触角 不长,达到前胸侧角,末端5节較粗,第3、4两节約等长, 第2节稍短,与第6节等长。前胸背板椭圓形,侧角在本 属內較圓闊,刻点細弱,以中部的較明显。鞘翅显較胸基 寬闊,肩角鈍圓,較尖,前伸达前胸中綫,两側略微膨闊; 駝頂低矮,頂端呈粗橫脊,与第2行距短級脊相連接; 盘 区刻点尚粗深,行列整齐;做边坦斜,表面刻点极其浅弱, 尾端略具細毛。



ginpinica 早新种

体长 5.9 毫米, 体閣 5 毫米。

正模♀ 云南:金平猛喇(400米, 1956、IV. 27)。

Taiwania (Cyclocassida) uniorbis, 新种

卵形带盾形,尾端較尖,做边坦斜,尙寬闊,透明。体底色淡黃或淡棕黃,带金黃閃光; 背面盘区有一个相当闆的黑圈,由前胸背板后半部起,通过鞘翅两侧,到端部弯向中縫遇

合。腹面、足及触角均呈淡棕黃,后者末节端部稍深。

图 6 Taiwania (C) uniorbis 新种

1956, VI, 22)

体最闊处在肩角稍后, 鞘翅基緣較前胸背 板 稍 闊。 头部額唇基狹长,面平,侧沟清晰,中区刻点近乎缺如。 烛角較长,向側超过前胸側角約1-2节,第2、6两节約 等长,第3节略长于第4或第5节。前胸背板紡錘形,側 角尖狹,处于中綫前,刻点細小,基部較清晰。 鞘翅两側 格微膨闊,肩角尖小,前伸到达前胸中綫,駝頂很低矮,頂 端呈橫隆脊,与第2行距級脊連接;盘区刻点粗大,行列 修齐,一般闊于行距,后者以第2条为最闊而比較隆凸, 但亦不甚显著; 做边腰部至少有每翅盘闊之半。

体长 5.4-6 毫米, 体闊 4.3-5.2 毫米。 正模♀ 副模1♀ 云南: 屏边大围山(1500 米,

Taiwania (Cyclocassida) variabilis, 新种

体較小, 次圓或橢圓形。 体色淡黄至赭黄; 背面色泽变异很大, 淡色个体仅于鞘翅 盘侧具一条狹而弯曲的黑級带和第2行距中部有一或两个小黑点; 有时鞘翅黑斑或多或 少扩大,在最深色个体,則前胸和鞘翅盘区几乎全部黑色,仅留出外周沿一条淡色边,但 黑中常混杂模糊的紅褐色斑紋。 腹面、触角及足全部淡色,触角末端 1—3 节有时呈熏烟 色。

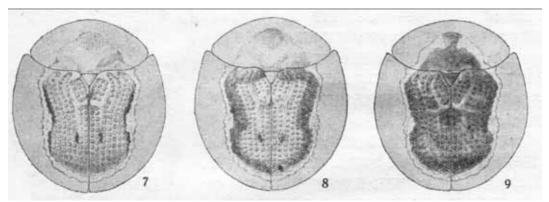


图 7-9 Taiwania (C) variabilis 新种,示体背顏色变异

体背不甚拱起。額唇基狹长,倍长于中闊,面平。触角长度向側略超过前胸側角,第 3—5 节約等长,均长于第 2 节。 前胸背板橄欖形带紡錘形,侧角較不狹尖,盘区刻点細弱,中部較清晰,基緣前中央有橫凹印。鞘翅基部較前胸背板寬闊,肩角尖狹,前伸达到前胸中綫;駝頂低矮,頂端呈脊状,与第 2 行距纵脊相連拼,后者粗闊;盘区刻点粗深,排列整齐。

体长 4.5-5.8 毫米, 体閣 4-5 毫米。

正模♂ 云南:景东 (1200 米, 1957、IV. 25),配模♀ 同上 (1957、V. 3),副模 3 ♂♂、2 ♀♀ 景东,思茅,河口,西双版納。

Taiwania (s. str.) binorbis, 新种

圓卵形略带盾形,尾端較平圓; 鞘翅基部显較胸基寬闊,敞边平坦,外緣略微反挠,甚 透明。 体光亮,底色淡黄,背面盘区具黑圈在中后部圈內另有半个环圈,形成圈中之圈。

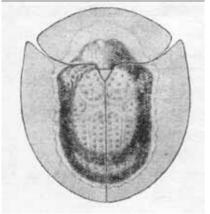


图 10 Taiwania (s. str.) binorbis 新种

触角淡黃,末节頂端有时微帶褐色。 腹面及足全部淡色。

体最闊处在鞘翅肩角后,鞘翅基部闊于前胸背板。 头部額唇基长胜于闊,面平光洁,側沟明显,两沟端相接 于触角基之間,組成鈡形的中区。 触角末端 6 节較粗多 毛,基部 4 节光洁,第 5 节处于两者之間,細毛較第 4 节 稍密,第 2、6 两节等长,3—5 各节长度几相等。 前胸背 板橄欖形,侧角闊,不算尖狹,处于中綫,刻点細、不清晰。 鞘翅盘区尚光洁,无显著凹洼,基、侧窝极浅,駝頂微拱, 呈粗横隆脊,伸达第 2 行距,盘区刻点尚粗,但一般狹于 行距,排列整齐紧密,基部稍形稀疏。

体长 5.8-6.5 毫米, 体闊 5-5.6 毫米。

正模♂ 云南: 芒市三台山 (1955、V. 18),配模♀ 云南: 車里石灰窰(560米,1957、

IV. 26), 副模 2 ♂ ♂ 、1 ♀ 云南: 西双版納。

Taiwania (s. str.) immaculicollis, 新种

椭圓形带盾形,前胸前緣弧度較浅,背面相当拱凸,前胸敞边平坦,鞘翅敞边斜峻。体淡棕黃,包括背面底色、腹面、触角及足,触角末节端部灰褐色;鞘翅盘区具棕紅和黑褐色

斑紋, 駝頂中縫、盘側級带与盘基为棕紅色, 級带前狹后闊, 至后部弯向中縫; 黑褐色小斑每翅約7个, 其分布如图11所示; 駝頂隆脊色泽較淡; 做边淡黃, 透明。

体最闊处在鞘翅肩角后,前胸背板远較鞘翅基 緣 狹 縮。 头部額唇基长闊近乎相等,面平,侧沟明显,中区三角形,頂端 具微刻点 2 个,并有細毛数根。触角較长,向側超过胸侧角两 节,末端 5 节較粗多毛,第 3 节长于第 2 节,比第 4、5 各节均 短。前胸背板椭圆形略带紡錘形,侧角倚圓闊,处于中綫,表 面光洁无刻点。鞘翅肩角前伸接近前胸背板中綫; 駝頂呈瘤 状凸起,頂端隆脊不明显,至第 1 行距分成前后两支,各斜伸 到第 6 行距止,此两支頗高凸粗闊; 基、侧窝明显,但不算深;

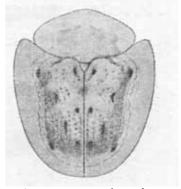


图 11 Taiwania (s. str.) immaculicollis 新种

盘区刻点不密,整齐,基部則稀少較散乱,每鞘翅以中区較粗,两侧細小,第1、2行刻点更形細稀;行距一般平坦,駝頂后第1一4行距显著隆凸。

体长 6毫米, 体闊 4.9毫米。

正模♀ 云南:普洱(1400米, 1955、IV. 30)。

Taiwania (s. str.) perplexa, 新种

次圓形,尾端較圓,敞边較闊,其腰部超过每翅盘闊之半,平坦,外緣反挠。 体色淡黄或淡棕黃,前胸背板中央具一个不甚清晰的"V"字形褐色斑紋,有时极淡,甚至消失。 小盾片淡色。 鞘翅盘区黑地黄斑,其主要斑紋大致如下:盘側最外行距及盘端区域淡色,盘

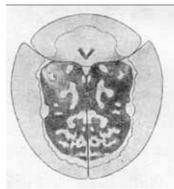


图 12 Taiwama (s. str.)
perplexa 新种

面黑色部分很广,在中后部形成一相当闊的环带,在此带前为一横形淡斑区,在駝頂稍后沿中縫到第1、2行刻点一带及駝頂前小盾片端沿大致淡色;第2行距基部2/5 极闊,淡色,但在基窝前側部分較狹,黑色,由此向前分隔出一个淡色基斑,向后則成为显突的駝頂分枝,此外在肩瘤內側及他处亦还有几个淡斑,数量和大小变异不一。触角末端1、2 节烟灰色。腹面及足全部淡色。

鞘翅基部显較胸基寬闊。額唇基板狹长,两側較直,中 区面平光洁。触角超过胸側角一节左右,第3—5各节近乎等 长,或第3节略长,末端5节漸变粗厚。前胸背板或多或少带 紡錘形,側角圓度中等,一般处于中綫前,亦有在中綫的,盘区

刻点明显,但前部缺如,基部中央具凹印。鞘翅肩角前伸达到胸中綫,角度較胸側角尖狹; 盘区不算拱凸,駝頂微隆,頂端橫脊細狹,分枝与第2行距級脊相連,后者极其隆突;刻点 粗密整齐,第1—4行距或多或少隆起,尤以第2行距較显著。

体长 4.3—5.6 毫米, 体閥 3.8—4.8 毫米。

正模♂ 云南:西双版納,配模♀ 云南:思茅——普文龙山(950—1300 米, 1957、V. 11),副模2♂♂,8♀♀ 云南:瀾滄,金平,西双版納。

Taiwania (s. str.) simanica, 新种

卵圓或次圓形,尚拱凸,鞘翅基緣較胸基略微寬闊。 体色淡黄带油光,背面盘区具黑褐色小斑紋。 触角淡棕黃,末端 2、3 节略带熏烟色。 前胸背板基部中央有一个小而窄略

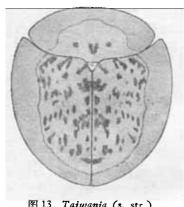


图 13 Taiwania (s. str.)
Simanica 新种

带"V"字形深色斑,其左右侧各有一个深色小圓点,但有时深斑模糊或完全消失。 小盾片淡色,有时基角黑褐。 鞘翅深色斑大都由小斑点排成为小纵条,有时盘侧黑区稍大,一般駝頂短橫脊淡色,黑斑处于行距上,如图 13 所示。 腹面大部黑色,腹部外緣淡色。足棕黃。

体最闊处在鞘翅中前部,敞边尚寬,坦斜,其腰部相等或略闊于每翅盘面,外緣反挠不显。額唇基长胜于闊,两侧較平行,側沟显著,中区带鈡形,面平光洁。 触角达鞘翅肩角,末端5节渐粗,第2、6两节約等长,第3节約比第4、5各节为长,第8—10各节长略胜于闊。前胸背板紡錘形,侧角狹圓,处于中綫前,刻点細疏清晰。鞘翅肩角尖小,前伸不

到胸側角; 駝頂低矮,頂端橫脊显著,側端与第2行距級脊相連,有时为向外弯曲伸达敞边中桥; 盘面刻点尚粗深,紧密整齐,第2行距显著隆凸。

体长 4-5毫米, 体闊 3.5-4.2毫米。

正模 \checkmark 云南:思茅(1957、II.14),配模 \checkmark 同上,副模 20 \checkmark 与早早——云南:下关,保山,龙陵,芒市,景东,瑞丽,思茅,普文。

駝龟甲属 Cyrtonocassis, 新属

属模 C. tumidicollis, 新种

分布 我国云南,緬甸,錫金,印度。

本属与台龟甲属 Taiwania 及角沟龟甲属 Chiridopsis 外表近似,可以下列特征来区别: 1.体背面极 其拱凸,呈半球圓形, 2.前胸背板盘区拱凸,两侧与 做边分界处具一深沟,显得盘区更为突起,每边向前各 形成一个圓錐形突出, 3.前胸腹板无触角沟, 触角伸

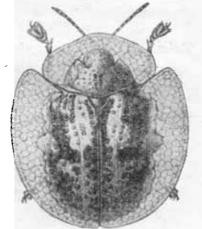


图 14 Cyrtonocassis tumidicollis 新种

展至中胸后側片,第3节远較第2节为短,第4、5两节近乎等长,末端5节显著粗厚, 4. 鞘翅駝頂平拱,不呈瘤突更不成峯,盘区刻点粗大,敞边寬闊,向下垂罩,尾端細毛較多, 5. 爪附齿式。

Cyrtonocassis tumidicollis, 新种

次圓形或短椭圓形,一般雄虫較圓闊,鞘翅盘区极其拱凸呈半球圓形,敞边垂罩。 背面盘区栗色,前胸背板中部具两个深色小条斑,不清晰,略呈"V"字形,但基部一般不相合 ,有时此斑缺如。鞘翅盘区具淡火黄斑紋,計盘侧第9—10行刻点間、盘基第1—4行刻 点間、盘中部第1—3行刻点間直到端部,以及一条横带从盘中央上斜至盘腰間均系淡色,

在淡色带中的刻点仍为深色。敞边淡黄或淡棕黄,透明。腹面前胸与中胸中部、后胸全部 及腹部中区呈深栗色。触角全部淡棕黄。

鞘翅基部較胸基寬闊。 額唇基扁闊,半圓形,頂端明显隆起,触角超过胸側角一节(♀)或两节(♂),第 3—5 各节等长,7—10 每节均长显胜于闊。前胸背板椭圓形,侧角极闊圓,盘区两側前方各具很显著的錐形突出,盘基侧角各有一条弯曲沟紋,到小盾前側为止,刻点稀深清晰。鞘翅表面尚光洁,无明显隆脊与凹洼,駝頂平拱,刻点粗大,行列尚整齐;敞边垂罩,基部尤甚,端部极狹,只及腰闊的 1/3,尾端具細毛。

体长 6.4-7.5 毫米, 体闊 5.5-6.5 毫米。

正模♂ 云南:金平猛喇(370米,1956、IV.22),配模♀ 云南:小勐养(850米,1957、V.5), 副模3♂♂,4♀♀ 云南:金平,布沼埧,弥勒,西双版納。

RESULTS OF THE ZOOLOGICO-BOTANICAL EXPEDITION TO SOUTHWEST CHINA 1955—1957

(COLEOPTERA, CASSIDINAE)

SICIEN H. CHEN AND Y. ZIA

The tortoise beetles here dealt with were collected by Chinese and Soviet entomologists during their co-operative expeditions to Yunnan in the years 1955—1957 and to Szechuan in 1955. The collection contains 60 species distributed in 13 genera, of which 1 genus, 2 subgenera and 10 species are described as new and 5 species are recorded for the first time in China. All holotype specimens are kept in the Institute of Entomology of Academia inica, paratype specimens are partly kept in Academia Sinica and partly in the Institute of Zoology of Academy of Sciences, USSR. The new genera and species are characterized as follows:

Notosacantha ginpinensis, n. sp.

(Fig. 1,3)

Body ovate, rotundate. Colour red-brown, the explanate margins broadly yellow-brown, with the window-spot small, not very distinct; disc of pronotum and elytra, including the scutellum, pitchy black.

Head with a deep median longitudinal furrow, the frontal prolongation emarginate at apex and more or less rounded at sides. Elytra with the two longitudinal costae well-developed, but not connected with each other by a basal bridge; the middle costa is more strongly raised than the humeral one, the latter being more or less obsolete in the middle. On the middle costa, there are four distinct elevations or tubercles, the third tubercle is the highest and sending out three branches of which the external branche bifurcate at a short distance; the fourth tubercle is characterized by having a short, rudimentary inner branch, not reaching the suture.

Length: 4 mm.; breadth: 3.6 mm.

Holotype: 2, Yunnan: Ginping (15. IV. 1956).

Notosacantha nigrodorsata, n. sp.

(Fig. 2,4)

Body subquadrate, underside brown, upperside black, with the margins all round narrowly yellow, and a large, pale window-spot on each side of the elytra.

Allied to the preceding, differing in the humeral costa of elytra being less distinct, the middle bridge between the two costae somewhat stronger, the apical bridge more sharply raised, and the fourth tubercle of the middle costa without an inner branch towards the suture. The window-spot of the present species is also larger, with only two longitudinal rows of punctures along its outer margin, whereas in the preceding species, there are three such rows.

Length: 4.5 mm.; breadth: 3.8 mm.

Holotype: of, Yunnan (31. III. 1957).

Taiwania Spaeth, 1913

The genus Taiwania Spaeth, as here understood, differs from the old genus Cassida L. as follows:

- 1. Taiwania: Fronto-clypeus and pronotum usually smooth and impunctate, when punctate, the punctures are fine and scattered, with their interspaces not wrinkled; elytra with explanate margins usually broad and transparent, the humeral angle strongly projecting forward, reaching or passing the middle level of pronotum.
- 2. Cassida: Fronto-clypeus usually wrinkled and croarsely punctured; elytra with explanate margins opaque or subhyaline, usually narrow, the humeral angle generally not extending to the middle level of pronotum.

Thus defined, the genus *Taiwania* comprises chiefly oriental forms and the genus *Cassida*, principally palaearctic species. Both genera contain species with either simple or appendiculate claws.

Chinese species of the genus Taiwania may be arranged under three subgenera, characterized as follows:

- 2(1) Claws simple:

Cassida appluda Spaeth, 1926, originally described from Viet-Nam, is designated as the type species of Yunocassis, and Taiwania variabilis, a new species described below, is designated as the type species of Cyclocassida.

Taiwania (Cyclocassida) ginpinica, n. sp.

(Fig. 5)

Broadly oval or subrounded, yellow-brown, underside with the anterior margin of fronto-clypeus, the breast and a large median basal area of abdomen black, the very base of femora more or less infuscate; upperside with the pronotum dark red-brown and an obsolete patche on each side near base, the elytra with elevated flavous spots as shown in figure 5.

Distinguished from *T. variabilis* and *T. uniorbis* by the pronotum rather broadly rounded on each side, the fronto-clypeus distinctly narrower, only about 1.5 times as long as broad in the middle and the elytra with pale elevated spots.

Length: 5.9 mm.; breadth: 5 mm.

Holotypes 2, Yunnan: Ginping (27. LV. 1956).

Taiwania (Cyclocassida) uniorbis, n. sp.

(Fig. 6)

Body ovate; colour yellow-brown, antennae entirely pale, pronotum and elytra with a very characteristic black marking in the form of an oval ring as shown in figure 6.

Allied to T. variabilis, distinguished chiefly by the body less rounded, the explanate margins of elytra narrower and the upperside differently coloured.

Length: 5.4—6 mm.; breadth: 4.3—5.2 mm.

Holotype: ♀, paratype: 1♀, Yunnan (屛边大围山, 22. VI. 1956).

Taiwania (Cyclocassida) variabilis, n. sp.

(Fig. 7-9)

Body broadly ovate or subrounded. Colour very variable, under side always pale yellow-brown, the two or three ter minal segments of antennae more or less infuscous; upperside with the explanate margins of pronotum and elytra pale yellow, disc of pronotum varying from yellow-brown to black, disc of elytra sometimes black with indistinct piceous patches, sometimes red with black markings which are usually in the form of broad or narrow bands situated along the margins.

Fronto-clypeus flat, smooth and impunctate, about twice as long as broad in the middle. Pronotum fusiform, narrowly rounded on each side, disc sparingly covered with weak punctures. Elytralhump very low, with a slight, transverse elevation on each side connecting the costa of the second interstice of punctural rows, this interstice is usually marked with a black spot below the middle claws simple.

Length: 4.5-5.8 mm.; breadth: 4-5 mm.

Holotype: ♂, allotype: ♀, Yunnan (景东 25. IV—3. V. 1957), paratypes: 3♂♂, 2♀♀, Yunnan.

Taiwania (s. str.) binorbis, n. sp.

(Fig. 10)

Broadly ovale, pale yellow-brown, upperside with a very characteristic black marking

as in *T. uniorbis*, but here the ring is doubled at apex (Fig. 10). It is further distinguished from *T. uniorbis* by the underside entirely pale, the claws appendiculate, and some other characters.

Length: 5.8-6.5 mm.; breadth: 5-5.6 mm.

Holotype: o, allotype 2, paratype 2oo, 12, Yunnan.

Taiwania (s. str.) immaculicollis, n. sp.

(Fig. 11)

Body ovate, rather strongly convex. Colour yellow-brown, elytra with deep reddish or piceous markings on the dorsal hump and lateral and apical areas, in living specimens the dorsal hump is probably goldened coloured.

Fronto-clypeus nearly as long as broad in the middle, with long hairs at the top similar to those of the lateral edge. Pronotum smooth and impunctate, sides moderately broadly rounded, with the widest portion situated about the median level of the surface or slightly before. Dorsal hump of elytra X-shaped, fairly strongly raised.

Length: 6 mm.; breadth: 4.9 mm.

Holotype: Q, Yunnan.

Taiwania (s. str.) perplexa, n. sp.

(Fig. 12)

Subrounded, pale yellow-brown, pronotum usually with a small V-shaped black spot in the middle near base, elytral disc black, with elevated yellow spots as shown in figure 12.

Allied to T. simauica, but the sides of pronotum is slightly more broadly rounded, the explanate margins of elytra are broader and the body is very differently coloured. From T. insulana Gress., the present species may be separated by the sides of pronotum being a little more narrowly rounded and the basal half of the second elytral interstice being black near base, thus separating the flavous colour into two spots.

Length: 4.3-5.6 mm.; breadth: 3.8-4.8 mm.

Holotype: \mathcal{Q} , allotype: \mathcal{O} , paratype $2\mathcal{O}\mathcal{O}$, $7\mathcal{Q}\mathcal{Q}$, Yunnan.

Taiwania (s. str.) simauica, n. sp.

(Fig. 13)

Body fairly convex, broadly ovate or subrounded. Colour yellow-brown with oily sheen, underside with breast and abdomen black, except the lateral and apical areas of the latter broadly pale brown; three small black spots on pronotum, the median one V-shaped, sometimes the spots are more or less obsolete, reduced or absent; elytra usually densely covered with small, elongate black spots which are mostly placed on the punctural rows, these spots are also variable and sometimes much reduced; the two or three terminal segments of antennae usually smoky.

Fronto-clypeus about one and half times as long as broad in the middle, sometimes longer. Pronotum narrowly rounded at sides, weakly and sparingly punctate in the middle.

Dorsal hump of elytra very low, its lateral transverse elevations fairly prominent and connected to the costa of second punctural interstice.

Length: 4-5 mm.; breadth: 3.5-4.2 mm.

Holotype: ♂, Yunnan (Siman, 14. II. 1957), allotype: ♀, Yunnan (下关), paratypes 18 specimens (♂,♀) from various localities of the same province.

Separated from T. imitatrix Gress.: by the underside of body black, the elytra differently spotted, with the branches of dorsal hump narrow, and the costa of second interstice more sharply raised.

Cyrtonocassis, n. gen.

The present genus resembles much *Chiridopsis* in general shape of body but without antennal furrow, it is allied to *Taiwania* and may be characterized as follows:

Body strongly convex, hemisphaerical. Pronotum broadest before middle, disc bounded on each side with a deep furrow so that its antero-lateral portion is projecting forward in the form of a tubercle. Elytra with dorsal hump not tuberculate, nor X-shaped; explanate margins transparent, steeply declivous, the apex with short hairs which are visible from above as in the case of *Thlaspida*. Claws appendiculate.

Type: C. tumidicollis, n. sp.

Cyrtonocassis tumidicollis, n. sp.

(Fig. 14)

Brown, breast and abdomen black, the latter with the sides and apex brown or redbrown, basal portion of femora piceous; disc of pronotum and elytra castaneous, explanate margins pale brown, transparent; on the pronotum, there is a dark indistinct marking, nearly V-shaped, placed in the middle before base; on the elytra, there are slightly elevated pale brownish markings, forming an irregular longitudinal band between the fourth punctural row and the suture, and an irregular transverse band below the middle, the punctures of the pale bands remain castaneous or piceous; antennae entirely brown.

Fronto-clypeus broad, semicircular, the top raised, usually assuming two small, nipple-like tubercles. Antennae extending back to a position just beyond the middle coxae, third segment one and half times longer than second but equals to fourth, the five terminal segments moderately thickened, each distinctly longer than broad. Pronotum rather narrow, sensibly less than twice as broad as long, sides fairly broadly rounded, with the broadest portion before the middle so that the anterior margin is less arched than the posterior; disc moderately closely covered with punctures which are fairly large but not deep, with a transverse furrow on each side along the base, the antero-lateral tubercles are well-defined, the furrows bound around the tubercle and sides of disc are rather deep. Elytra with the dorsal hump evenly convex, the punctures large and deep, arranged in regular longitudinal rows.

Length: 6.4-7.5 mm.; breadth: 5.5-6.5 mm.

Holotype: \mathcal{O} , allotype: \mathcal{O} , paratypes \mathcal{O} , \mathcal{O} , \mathcal{O} , \mathcal{O} , Yunnan.